

Motion Control System
DF64 Procedure Development
ACS Pre-Departure Moding Configuration
December 5, 1997

Identification Section:

Procedure Name:	ACS_Pre_Departure_Moding_Config
Applicability:	Departure of Flight 3A.
Frequency:	This procedure is performed before the departure sequence.
Objective:	Operational sequence used to set the timer which automatically mode the Station to RS attitude control upon Orbiter departure.
Description:	This procedure sets a delay timer, and Incorporates the value for use by the NCS software to monitoring of undocking sensors.
Crew Required:	One (non-specified) crew member is required for visual status check.
Power:	N/A
Data:	Required telemetry is given in the procedure.
Duration:	Concurrent with integrated and departure proxops timeline.
Location:	PMA2.
Parts:	PMA2 APAS docking mechanisms; Node 1MDMs; RS segment MDMs and Propulsion system.
Materials:	N/A
Tools:	N/A
Constraints:	None.
Assumptions:	Orbiter provides attitude control for the mated stack.
Reference Materials:	S684-10174 - 5/15/96; MDC 95H0250B 3/15/96 (Russian data), Pass2-100% 2A/3A, Engineering release cycle, and Standard Out Command and Telemetry files.

ACS PRE-DEPARTURE MODING CONFIGURATION

NOTE

Set/Configure Pending Back Off timer a minimum of one hour before undocking. Program default is ten seconds.

1. SET PENDING BACK OFF TIMER FOR ORBITER DEPARTURE

PCS

MCS: ACS Moding

ACS Moding

'Departure'

sel Pending Back Off Time

'Primary NCS'

cmd 10 Seconds

√Pending Back Off Time - 00:10

√Arm Status - Arm

'Secondary NCS'

cmd 10 Seconds

√Pending Back Off Time - 00:10

√Arm Status - Arm

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* If the Pending Back Off Time needs to be canceled or configured later,      *
* disarm the current Pending Time as follows:                                *
*                                                                              *
*   sel Back Off Time                                                         *
*   'Primary, Secondary NCS'                                                 *
*   cmd Cancel Pending Back Off Time                                         *
*   √Arm Status - Disarm                                                      *
```

2. INCORPORATE PENDING BACK OFF TIME

sel Back Off Time

'Primary NCS'

cmd Incorporate Pending Back Off Time

√Back Off Time - 00:10

√rm Status - Disarm

'Secondary NCS'

cmd Incorporate Pending Back Off Time

√Back Off Time - 00:10

√Arm Status - Disarm

3. VERIFY ACS MODING ROLE CONFIGURATION

'ACS Configuration'

- √Moding Role Primary, Secondary NCS - Full
4. VERIFY RUSSIAN SEGMENT MODE STATUS
- ‘ACS Configuration’
- √RS Mode Primary, Secondary NCS - Drift
5. VERIFY INITIAL ACS HW SIGNAL CONFIGURATION
- PCS ACS Moding:ACS Moding HW Signals
- ACS Moding HW Signals
- ‘Departure’
- √PMA2 Interface Sealed N1-1, N1-2 NCS - X
- √PMA2 Undocking Complete N1-1, N1-2 NCS - Blank
6. VERIFY NCS SOFTWARE DEPARTURE EVENT STATUS AND CONFIGURATION
- PCS ACS Moding
- ACS Moding
- ‘Departure’
- √Departure Event Primary, Secondary NCS - Blank
- √PMA2 Interface Sealed Primary, Secondary NCS - X
- √PMA2 Undocking Complete Primary, Secondary NCS - Blank